



Decentralized heat recovery unit - for class rooms $\leq 1100 \text{ m}^3/\text{h}$ (counterflow) type Eversky

Heat recovery unit with high efficiency up to 85% for ceiling mounting or semi-recessed installation in the ceiling. The range includes 4 sizes and for flow rates from 150 to $1.100 \text{ m}^3/\text{h}$.

Every **Eversky** model comes standard with a built-in CO_2 regulation.

The **Eversky** unit is available in 4 versions:

- **EVERSKY FIRST** (Basic unit with 2 filters, 2 fans and counterflow)
- **EVERSKY SMART** (First with electric preheating battery)
- **EVERSKY PREMIUM** (First with electric OR water post heating battery)
- **EVERSKY INFINITE** (Premium with electric preheating battery)

The **Eversky** is a self-regulating unit with an extensive regulation module.

This unit is only intended for an indoor installation.

The **Eversky** is the only school unit with a EUROVENT certificate!

Brand

- R-COVERY by ZEHNDER CALADAIR

Application

- Decentralized school unit
- Selfregulating ventilation and high efficiency heat recovery in non residential and industrial applications

Suitable for renovations: schools, nurseries, offices and commercial buildings

- Air filtration, temperature and CO_2 control
- Compact monoblock ventilation unit, with plug & play and energy-saving control system (EN 15232)

Composition

- Double skinned panels with high-density mineral wool insulation 25 mm (M0), fire class A2-S1
- Outer layer: prelacquered steel plate in pure white (RAL 9010) with protective film
- Inner layer: galvanized steel plate 10/10
- Large doors for easy access to the internal elements – patented system
- Patented mounting frame for easy ceiling mounting
- Round connections with lip sealing for all models
- Patented connection system: one type of unit that can be easily converted on site from rear connections to side or top connections
- Motorised dampers for outdoor air and exhaust air included
- Sloping and removable condensate tray; drain via siphon or via condensate pump (option)
- Built-in 100% Bypass, motorised and auto regulating
- Built-in regulation with external display IP65 (supplied loose in the unit)
- DIVA – regulation: CO_2 controlled ventilation
 - The unit is equipped with a Corrigo controller version 5.
 - The touchscreen controller type Easy 5.0 is supplied separately in the unit
 - The controller is supplied with 2m cable

- Non residential
- Counterflow heat exchanger
- R-COVERY by ZEHNDER CALADAIR
- $Q_v \leq 1100 \text{ m}^3/\text{h}$
- Horizontal
- Decentralized unit with heat recovery



- This cable can be extended on site to a maximum of 100m
- Integrated FREE COOLING and NIGHT COOLING function
- Supply grille with double deflection in RAL9010
- Built-in temperature sensors (4)
- Built-in clock for operation between two flow rates
- Built-in week clock and public holidays
- Safety switch
- Pressure switch on inlet filter **F7**
- Pressure switch on each fan
- Standard Modbus or Bacnet available
- Only available in right execution (see configuration)

Fan

- Direct driven EC motor with electronic commutation (EC) with high efficiency, thermal protection and integrated speed control
- The EC technology ensures limited energy consumption by managing and controlling the operating point (regulation from 10 to 100%)
- Low noise level (< 35dB(A) at maximum speed at 1m) for a better acoustic comfort

Exchanger

- Static counter-flow heat exchanger made of seawater resistant aluminium
- Efficiency >85% (EN308)
- Frost protection by means of bypass control

Filter

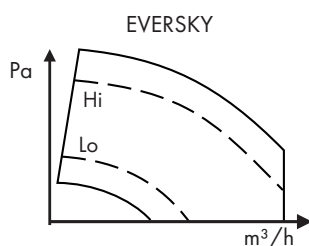
- Filters are placed directly in front of the components for optimal protection
- Mounted on sliding rails with lip seals to ensure efficient air tightness
- **Eversky** basic configuration with a **F7** - ISO 16890 ePM1 55% - (inlet air and exhaust air) filter
- **F7** high efficiency filter: 10x higher filtration surface than a gravimetric filter and life span 2.5x longer

Versions

- **EVERSKY FIRST** (Basic unit with 2 filters, 2 fans and counterflow)
- **EVERSKY SMART** (First with integrated electric preheating battery)
- **EVERSKY PREMIUM** (First with integrated post heating battery)
 - **EVERSKY PREMIUM BE**: ventilation unit with electric post heating battery
 - **EVERSKY PREMIUM BC**: ventilation unit with water heating battery
- **EVERSKY INFINITE** (Premium with integrated preheating battery)
 - **EVERSKY INFINITE BE**: ventilation unit with electric post heating battery
 - **EVERSKY INFINITE BC**: ventilation unit with water heating battery

Options

- **DIVA®**: Proportional modulating flow rate (between a set min. and max. flow rate) of each fan according to a built-in CO₂ measurement. The amount of CO₂ (number of ppm) is adjustable in the control.



Certification

- The device is tested according to NBN EN 308: www.epbd.be
- Efficiency of the heat exchanger of more than 85% (EN308), in accordance with RT2012 and ErP 2009/125/EC directives
- EUROVENT classifications according to EN1886 and EN13053 (model box AIRFLAT)
- Standard construction with double skinned panels of 25mm
- Mechanical strength class: D1
- Air tightness: Class L1
- Conductivity: T3
- Thermal bridge factor: TB3
- Filter leakage class: F9
- Exterior panel made of lacquered steel 10/10
 - Finish RAL7035 - 25µm, gloss 40%, film 80µm
- Inner panel made of galvanized steel 10/10
- Insulation: high density 25mm mineral wool, fire class A2-S1 (M0)

Accessories

- Galvanised canopy with grille, type **UT**
- Digital control **ED Touch** for controlling of GTDHR(V), Hexamotion(-S), Freetime(-S), Silvertop, Neotime, Eversky units
- Spare filter **FS-EVERSKY**
- Connection piece for fittings, type **MDV**

Text for tender

See downloads

Order example

EVERSKY 500 PRE BE D

Explanation

EVERSKY = type of heat recovery unit

500 = size (**500-750-900-1100**)

First = First uitvoering

Smart = Smart uitvoering

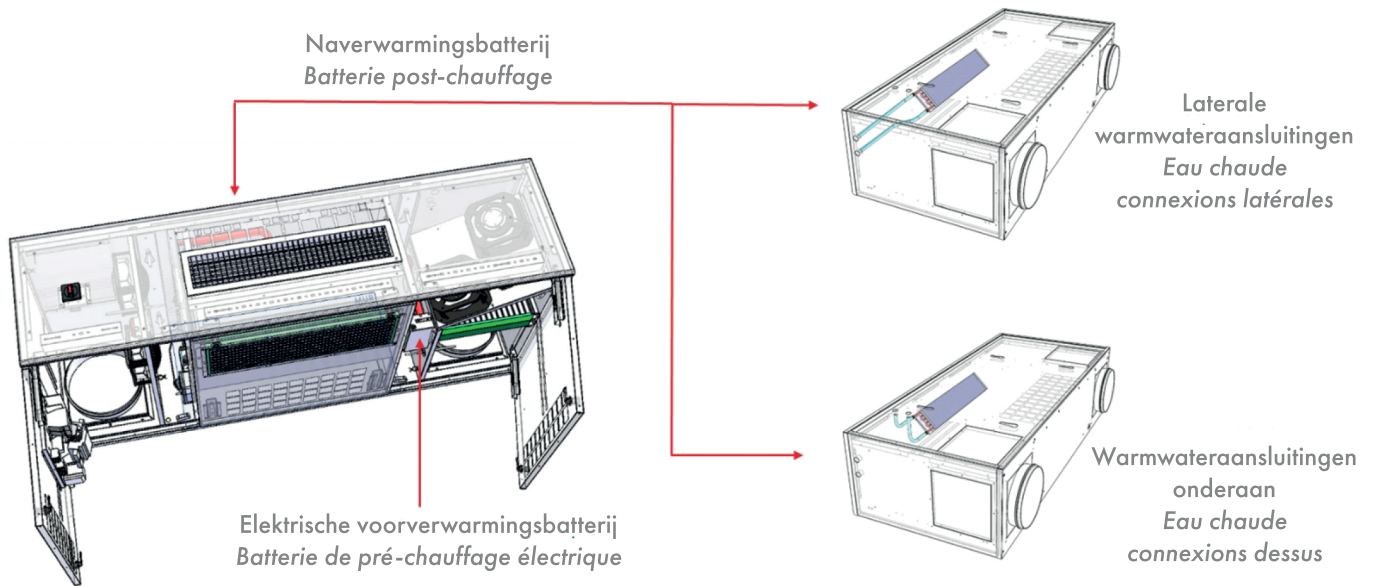
PRE = Premium version

INF = Infinite version

BE = with electric battery

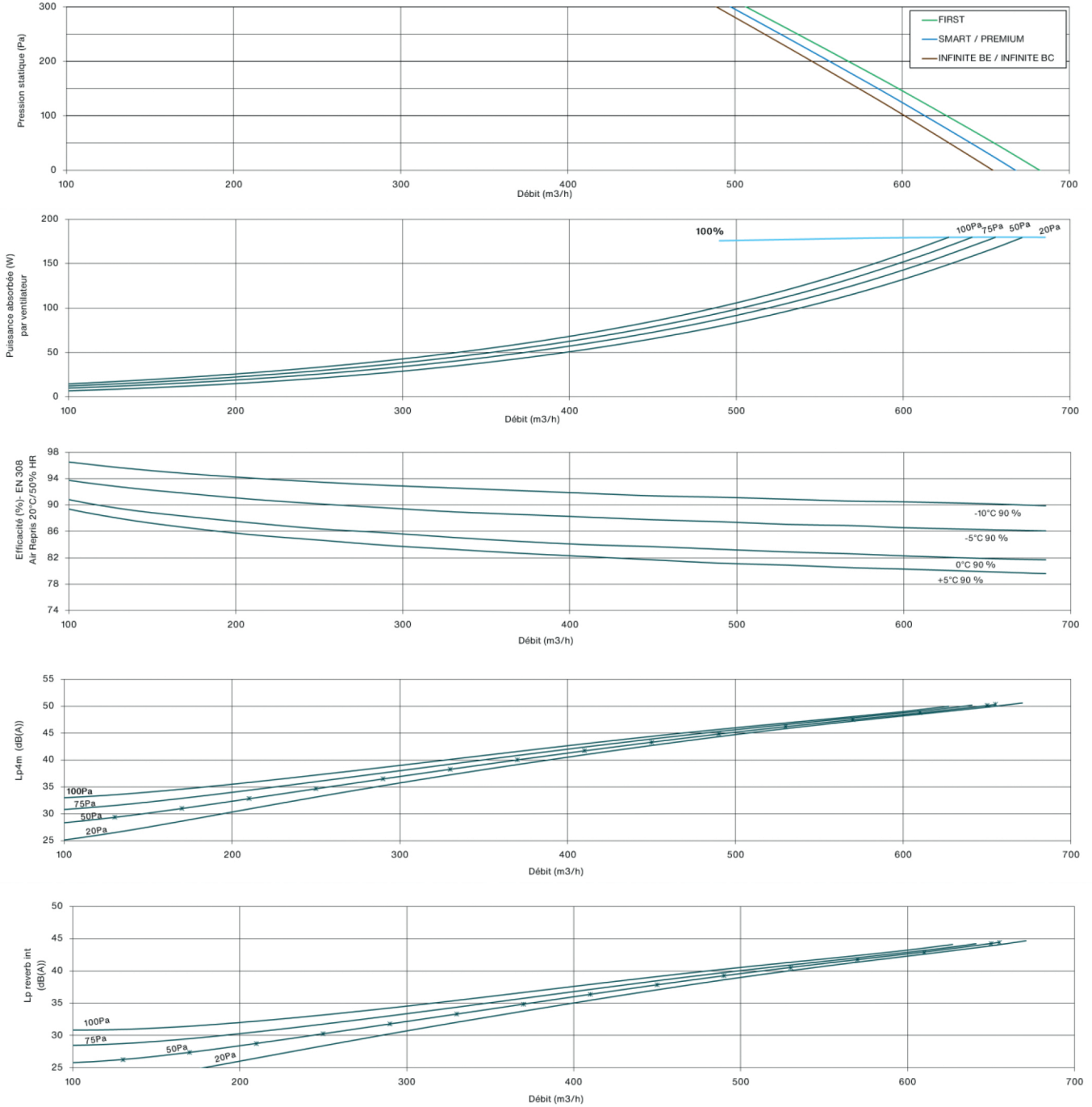
D = DIVA EC regulation

Battery

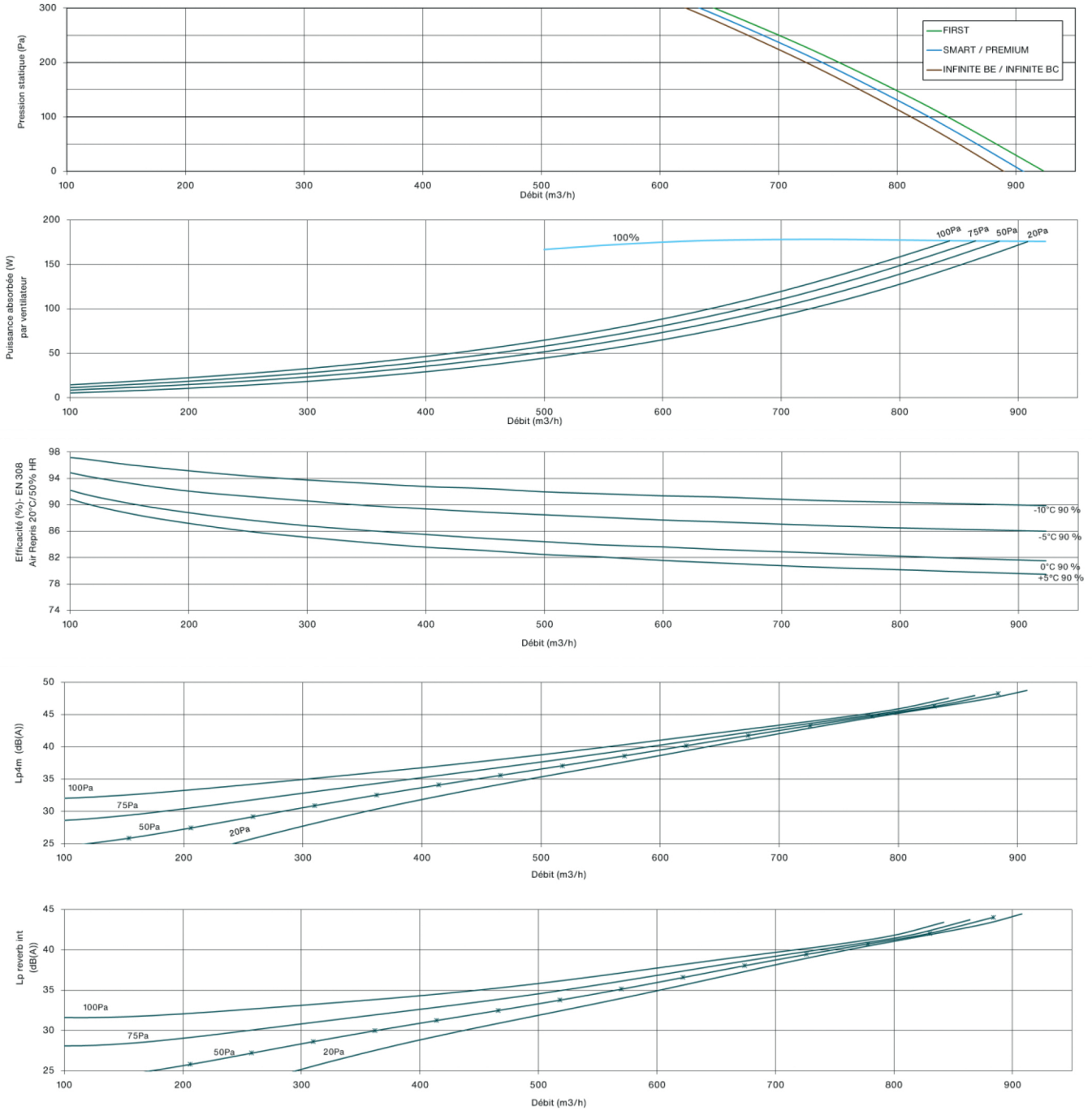


Selection curves

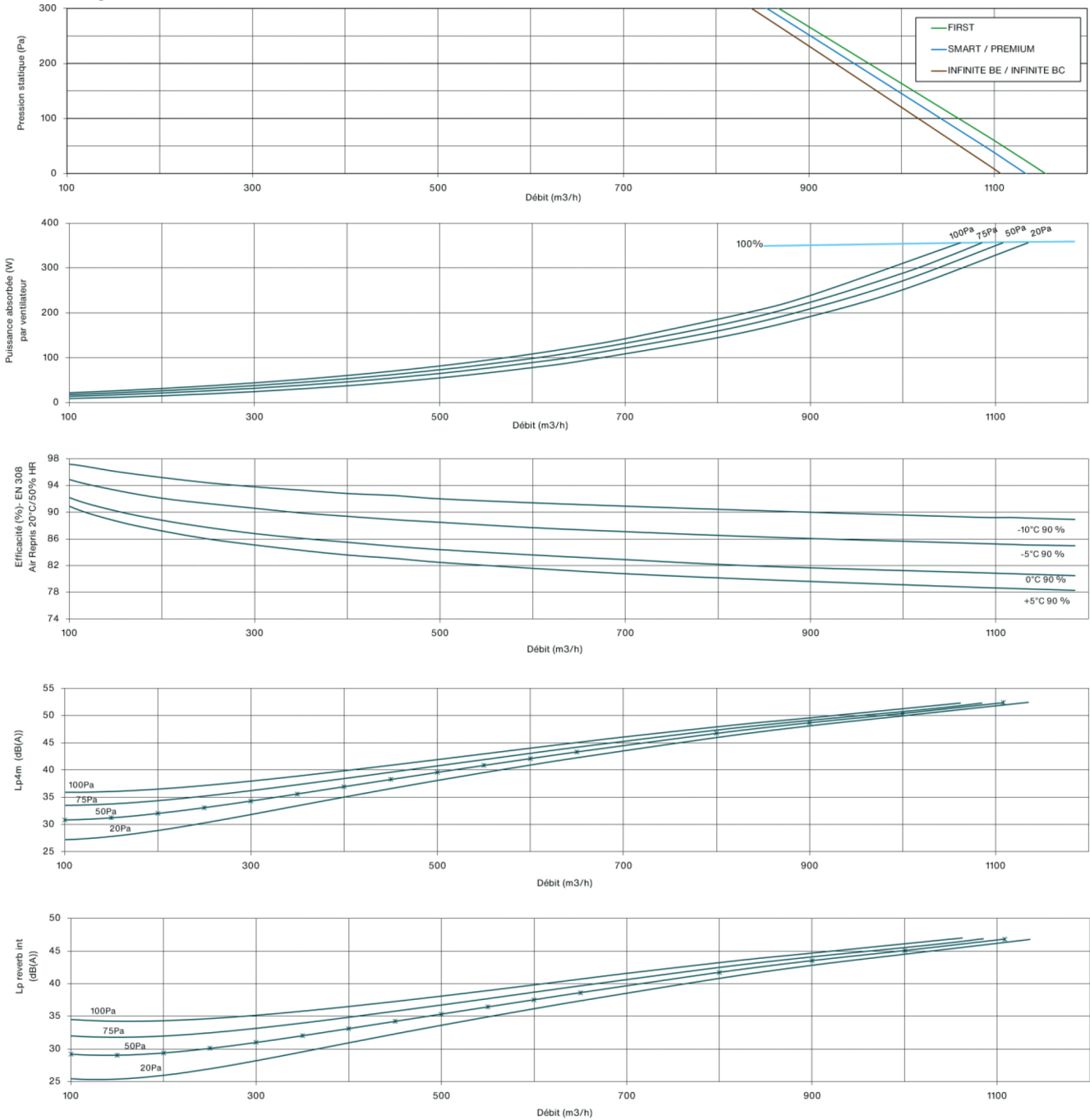
Eversky 500



Selection curves
Eversky 750

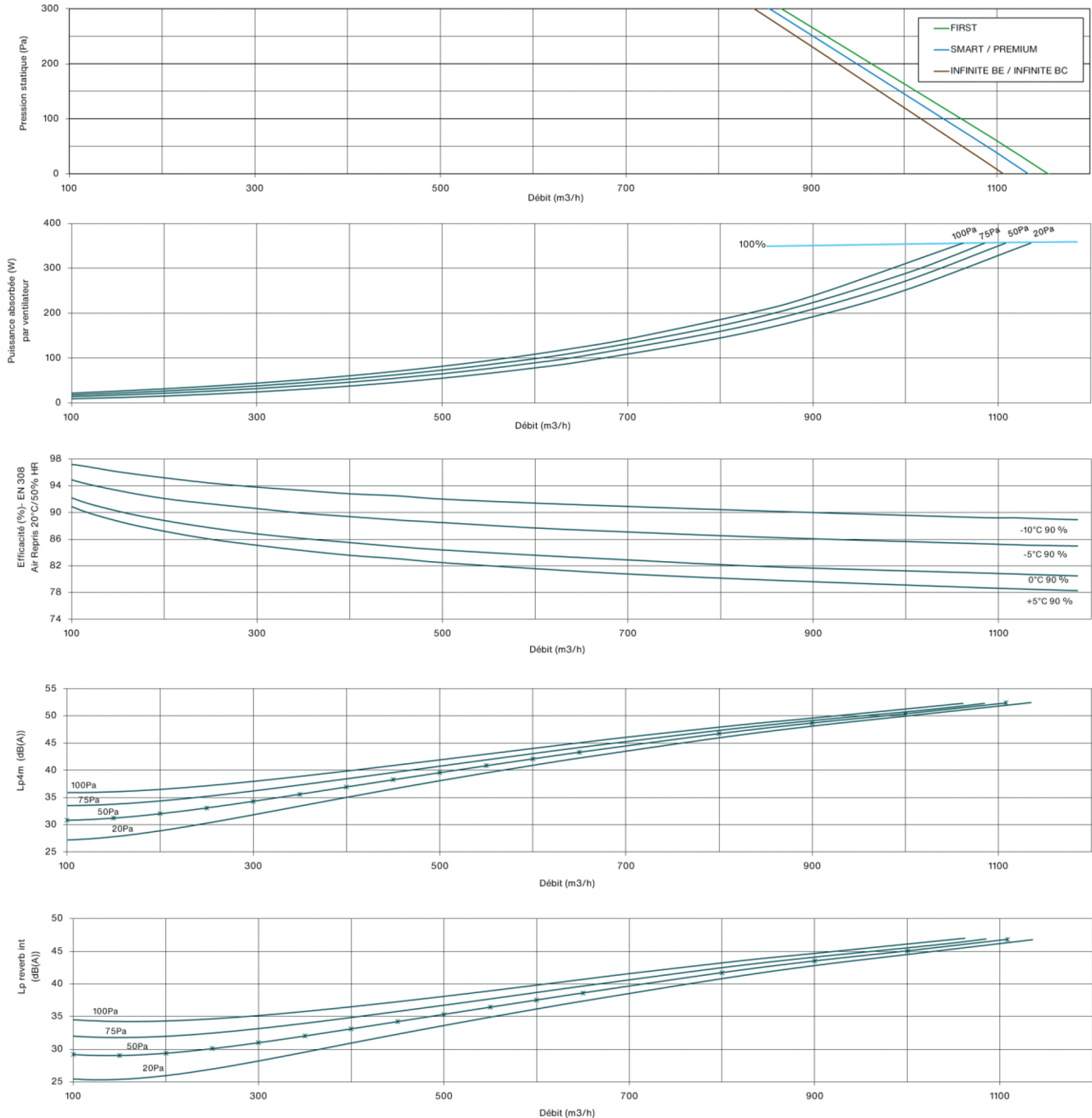


Selection curves
Eversky 900



Selection curves

Eversky 1100

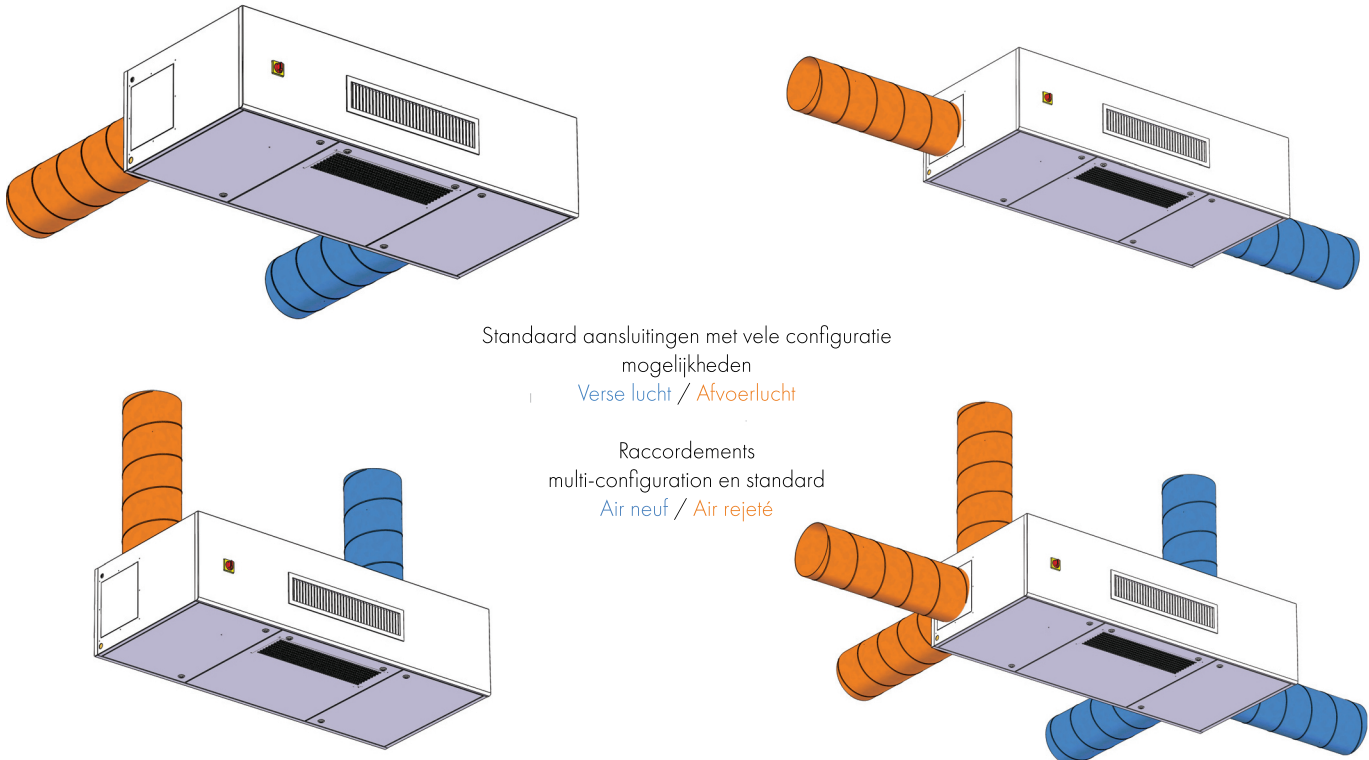


- Q [m³/h] = Flow rate
- Pst [Pa] = Static pressure
- P_{bat} [Pa] = Pressure loss batteries
- BE = Electrical battery
- BC = Ho twater battery
- P_{ab} [W] = Absorbed power per fan
- η [%] - EN 308 (20°C / 50%) = Efficiency
- Lwa pu = Sound power level in duct motor side
- Lwa ex = Sound power level in duct filter side
- Lpa @ 4m = Sound pressure level in free field with mounted inlet and outlet flanges

Technical data											
	P [W]	T [°C/°C]			FIRST / PREMIUM BC		SMART / PREMIUM BE / INFINITE BC			INFINITE BE	
					[V/Ph/Hz]	[A]	[V/Ph/Hz]	[A]	[V/Ph/Hz]	[A]	
500	2 x 169	-25 / 60	IP54/B	PTI	230/1/50	2.7	230/1/50	7	230/1/50	11.4	
750	2 x 170	-25 / 60	IP54/B	PTI	230/1/50	2.8	230/1/50	8.2	230/1/50	13.7	
900	4 x 169	-25 / 60	IP54/B	PTI	230/1/50	5.3	230/1/50	10.8	230/1/50	16.3	
1100	4 x 170	-25 / 60	IP54/B	PTI	230/1/50	5.5	230/1/50	11	230/1/50	16.5	

Battery										
Electric battery										
EVERSKY 500										
Temperature air intake	[C°]	0	-5	-10	-15	0	-5	-10	-10	-15
Air flow rate	[m3/h]	500		500		500		500		
Version		FIRST		SMART		PREMIUM BE		INFINITE BE		
Type of battery		Preheating battery		Preheating battery		Post heating battery		Preheating battery + post heating battery		
Capacity	[kW]	-		1		1		1 + 1		
Temperature at air outtake of unit	[C°]	16.2	16.3	16.3	14.6	22.2	22.3	19.6	22.3	20.6
EVERSKY 750										
Temperature air intake	[C°]	0	-5	-10	-15	0	-5	-10	-10	-15
Air flow rate	[m3/h]	750		750		750		750		
Version		FIRST		SMART		PREMIUM BE		INFINITE BE		
Type of battery		Preheating battery		Preheating battery		Post heating battery		Preheating battery + post heating battery		
Capacity	[kW]	-		1.25		1.25		1.25 + 1.25		
Temperature at air outtake of unit	[C°]	16.5	16.7	16.7	13.6	21.5	21.7	19.6	21.7	18.6
EVERSKY 900										
Temperature air intake	[C°]	0	-5	-10	-15	0	-5	-10	-10	-15
Air flow rate	[m3/h]	900		900		900		900		
Version		FIRST		SMART		PREMIUM BE		INFINITE BE		
Type of battery		Preheating battery		Preheating battery		Post heating battery		Preheating battery + post heating battery		
Capacity	[kW]	-		1.25		1.25		1.25 + 1.25		
Temperature at air outtake of unit	[C°]	16.3	16.5	16.6	12.8	20.5	20.7	17.7	20.8	17.0
EVERSKY 1100										
Temperature air intake	[C°]	0	-5	-10	-15	0	-5	-10	-10	-15
Air flow rate	[m3/h]	1100		1100		1100		1100		
Version		FIRST		SMART		PREMIUM BE		INFINITE BE		
Type of battery		Preheating battery		Preheating battery		Post heating battery		Preheating battery + post heating battery		
Capacity	[kW]	-		1.25		1.25		1.25 + 1.25		
Temperature at air outtake of unit	[C°]	16.4	16.6	16.8	14.9	19.8	20.0	17.1	20.2	18.4

Horizontal configurations - side by side flow - top view



The Eversky is **only** available in a **right** execution, viewed from the top of the device, following the direction of the airflow. **This unit is supplied as standard with the possibility to easily change rear connections to side or top connections on site!**

Dimensions																
	Ø [mm]	A [mm]	A1 [mm]	A2 [mm]	B [mm]	C [mm]	E [mm]	E1 [mm]	E2 [mm]	F [mm]	F1 [mm]	M [mm]	M1 [mm]	N [mm]	X [mm]	[kg]
500	250	1670	490	645	815	445	1297	185	230	742	384	332	170	130	70	132
750	315	1985	555	830	900	510	1547	220	260	927	449	415	170	170	70	170
900	315	1985	555	830	900	510	1547	220	260	927	449	415	170	170	70	180
1100	315	2365	615	1085	1050	530	1924	220	280	1185	510	565	170	190	70	220

